What is claimed is:

1. An optical transmitter module, wherein:

part of outgoing light from a laser source is made to pass through an etalon as a first ray bundle and is guided to a first photo-detection means;

at least the other part of the outgoing light is guided to a second photo-detection means as a second ray bundle without passing through the etalon;

an oscillating frequency of the laser source is maintained at a specific value, on the basis of a differential signal between the first and second ray bundle detected by the first and second photo-detection means;

the etalon is made up of two plate materials that sandwich a media plate therebetween;

the two plate materials each have an optical characteristic that transmits the first ray bundle;

one ends of the plate materials are each fixed to the media plate, and the other ends extend from the fixed portion to form a cantilever structure, or the center portions thereof are fixed to the media plate, and the other portions extend from the fixed portion to form a cantilever structure, or two media plates are provided, in which one ends of the plate materials are fixed to a first media plate, and the other ends are fixed to a second media plate, whereby the plate materials and the first and second

media plates form an inboard beam structure;

a space combined between portions, facing each other, of the two plate materials, which are not in contact with the media plate, serves as a multiple interference region of the etalon; and

the media plate is made of a solid material whose coefficient of thermal expansion is 10^{-7}/°C or less.

2. An optical transmitter module according to claim 1, wherein the two plate materials are optical polished plates.

3. An optical transmitter module according to claim 1, wherein in the structure that the two plate materials having the optical characteristic to transmit the light applied to the module sandwich the media plate therebetween, the media plate is disposed only on one ends of the two plate materials, and

the space combined between the portions, facing each other, of the two plate materials, which are not in contact with the media plate, serves as the multiple interference region.

4. An optical transmitter module according to claim 1, wherein in the structure that the two plate materials

having the optical characteristics to transmit the light applied in the module sandwich the media plate therebetween, two media plate materials as the media plate are disposed on two ends of the two plate materials facing to each other, and

the space combined between portions of the two plate materials facing to each other, which are not in contact with the media plate, serves as the multiple interference regions.

5. An optical transmitter module according to claim 1, wherein a ray bundle splitting means for causing the part, as the first ray bundle, of the outgoing light from the laser source to pass through the etalon and guiding the first ray bundle to the first photo-detection means is a semitransparent beam splitter.

6. An optical transmitter module according to claim 1, wherein either of the two sides, facing each other, of the two plate materials surrounding the space serving as the multiple interference region has a reflection film as a first side, and

a second side opposite to the first side having the reflection film has a substantially non-reflective film, or is a tilted surface with respect to an optical axis of an

incident light that falls on the plate material.

7. An optical transmitter module according to claim 1, wherein, of the plate materials constituting the etalon, the plate material placed on the incident side of the first ray bundle is a quarter wavelength plate.

8. An optical transmitter module according to claim 1, wherein the ray bundle passing through a part of the etalon and the ray bundle not passing through the etalon are to be obtained by splitting the incident light, and one of the ray bundle is made to pass through the etalon to be guided to a wavelength detecting photo-detector as the first ray bundle, and the other is made not to pass through the etalon to directly advance as a reference light as the second ray bundle.

9. An optical transmitter module according to claim 1, wherein the outgoing light from the semiconductor laser source are condensed, the etalon is tilted in the optical path of the condensed light, the ray bundle having passed through the etalon are split into two, one of the two-split light is received by the first photo-detection means, the other is received by the second photo-detection means, and the difference of photocurrents of the two photo-detection

means serves as the wavelength error detection signal.

10. An optical transmitter module according to claim 1, wherein:

the laser source is mounted on a silicon substrate,

the silicon substrate has a surface tilted to the optical axis of the laser light, which reflects the laser light, and

part of the laser light fall on the reflection surface, which has such a slope that the reflected light thereat is reflected in the direction of intersecting the optical axis of the laser beams falling on the tilted surface.

11. An optical transmitter module according to claim 10, wherein at least the laser source and the condensing lens are mounted on the silicon substrate, part of the laser light having passed through the condensing lens fall on the tilted surface to be guided to the second photo-detection means, and the laser light having not been reflected by the tilted surface are guided to the etalon.

12. An optical transmitter module according to claim 10, wherein the tilted surface is formed by means of anisotropic etching with respect to the crystallinity of

the silicon substrate.

13. An optical transmitter module according to claim 1, wherein the semiconductor laser source has a light emitting part capable of oscillating plural wavelengths, plural light beams emitted from the light emitting part are joined, part of the joined light beams are made to pass through the etalon to be guided to the first photo-detection means as the first ray bundle, at least the other part of the outgoing beams are guided to the second photo-detection means without passing through the etalon as the second ray bundle, and the oscillating frequency of the laser source is maintained at a specific value, on the basis of the differential signal between the first and second light beams detected by the first and second photo-detection means.